UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/749,895	12/29/2000	Xin Wang	111325-35	6682

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EXAMINER
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ART UNIT	PAPER NUMBER
2625	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/749,895	WANG ET AL.
	Examiner	Art Unit	
	Abolfazl Tabatabai	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 December 2000*.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-91* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-91* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *December 29, 2000* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____ .

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
   application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date *2,3,4,5,6,7*.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

3.   Claims 1-23, 25-27, 29-55, 57-59,61-77 and 79-91 are rejected under 35

U.S.C. 103(a) as being unpatentable over Rhoads (6,614,914 B1) in view of Downs et

al (6,226,618).

Regarding claim 1, Rhoads discloses watermark embedded and reader

comprising the steps of:

creating a watermark specification, which describes how to generate a

watermark (column 11, lines 33-38; column 44, lines 62-67; column 45, lines 1-16);

generating the watermark based on the watermark specification (column 6, lines 50-67 and column 15, lines 51-56); and,

merging the watermark into the target document based on the template specification to provide a watermarked document (column 6, lines 50-67). However, Rhoads is silent about the specific details regarding the step of:

generating a template specification, which describes how to merge the watermark into a target document.

In the same field of endeavor, however, Downs discloses electronic content delivery system comprising:

generating a template specification, which describes how to merge the watermark into a target document (column 29, lines 43-45; and column 41, lines 20-36); It would have been obvious to a person of ordinary skill in the art at this time the invention was made to use generating a template specification as taught by Downs in the system of Rhoads because Downs provides Rhoads a system with the digital content providers the ability to achieve fast settlement of payment through immediate sales reporting and electronic digital reconciliation as well as gain secondary sources of revenue through redistribution, of content. The digital content providers and retailers may realize reduced costs and improved margins.

Regarding claim 2, Rhoads discloses watermark embedded and reader comprising the watermarked document provided by merging the watermark into the target document is at least one of correspondence, books, magazines, journals,

newspapers, forms, software, photographs, images, audio clips, video clips, multimedia presentations, and multimedia products (column 40, lines 45-51).

Regarding claim 3, Rhoads discloses watermark embedded and reader comprising the watermark specification created includes content information, which describes content to be in the watermark (column 5, lines 17-24 and column 45, lines 1-2).

Claim 4, is similarly analyzed as claim 3 above.

Regarding claim 5, Rhoads discloses watermark embedded and reader comprising the content of each of the content information is application specific (column 11, lines 42-45 and column 19, lines 56-67).

Regarding claim 6, Rhoads discloses watermark embedded and reader comprising the content information specifies at least one of static information and dynamic information (column 33, lines 9-13).

Regarding claim 7, Rhoads discloses watermark embedded and reader comprising the watermark specification created includes mark technology specification which describes a specific watermarking technology to be used in the step of generating the watermark (column 2, lines 49-61).

Regarding claim 8, Rhoads discloses watermark embedded and reader comprising the mark technology specification includes parameters needed by the specific watermarking technology during the step of generating the watermark (column 6, lines 60-67).

Regarding claim 9, Rhoads discloses watermark embedded and reader comprising 9. The multi-stage watermarking process of claim 8, wherein the specific watermarking technology is at least one of DataGlyph, DigiMarc ,

Verance 's Electronic DNA, Alpha Tech. 's EIKON Amark , Audiomark. and Videomark. and Blue Spike, applications (column 36, lines 60-65).

Regarding claim 10, Rhoads discloses watermark embedded and reader comprising the watermark specification created includes a target object specification which describes at least one of a target object and a characteristic of the target object into which the watermark is generated (column 3, lines 34-42 and column 12, lines 52-56).

Regarding claim 11, Rhoads discloses watermark embedded and reader comprising the target objects specification specifies at least one of a shape, color, font and resolution of an image (column 5, lines 37-48 and column 22, lines 24-31).

Regarding claim 12, Rhoads discloses watermark embedded and reader comprising the target object specification includes a pointer pointing to a content information which describes the content to be inserted in the watermark (column 36, lines 1-4).

Regarding claim 13, Rhoads discloses watermark embedded and reader comprising the watermark specification created is described using a watermark specification language and has grammar elements that: identifies the watermark specification, identifies a specific watermarking technology to be used, and identifies a target object in which the watermark is generated (column 40, lines 17-25).

Regarding claim 14, Rhoads discloses watermark embedded and reader comprising the watermark specification described using the watermark specification language has grammar elements that at least one of: identifies version of the watermark specification language, identifies a name of the watermark specification, and specifies technology of content information of the watermark specification (column 9, lines 18-33 and column 40, lines 17-25).

Regarding claim 15, Rhoads discloses watermark embedded and reader comprising the template specification generated includes a merge map associated with the watermark specification which describes where the watermark is to be merged into the target document (column 7, lines 17-27 and column 15, lines 50-56).

Regarding claim 16, Rhoads discloses watermark embedded and reader comprising a plurality of merge maps are associated with the watermark specification (column 11, lines 23-27).

Regarding claim 17, Rhoads discloses watermark embedded and reader comprising the template specification generated includes a merge technology specification which describes a specific merging technology to be used in the step of merging the watermark into the target document (column 35, lines 1-3 and 39-41).

Regarding claim 18, Rhoads discloses watermark embedded and reader comprising the merge technology specification indicates at least one of PostScript. forms, Document Object Model, XML, and MS Office. Technologies (column 12, lines 8-18).

Regarding claim 19, Rhoads discloses watermark embedded and reader comprising the template specification generated includes merge target specification which describes at least one of the target document and a characteristic of the target document into which the watermark is merged (column 44, lines 6-21).

Claim 20, is similarly analyzed as claim 13 above.

Claim 21, is similarly analyzed as claim 14 above.

Regarding claim 22, Rhoads is silent about the specific details regarding the step of generating the watermark includes the step of binding dynamic information in the watermark.

In the same field of endeavor, however, Downs discloses electronic content delivery system comprising the step of generating the watermark includes the step of binding dynamic information in the watermark (column 14, lines 19-27).

It would have been obvious to a person of ordinary skill in the art at this time the invention was made to use the step of binding as taught by Downs in the system of Rhoads because Downs provides Rhoads a system with the digital content providers the ability to achieve fast settlement of payment through immediate sales reporting and electronic digital reconciliation as well as gain secondary sources of revenue through redistribution, of content. The digital content providers and retailers may realize reduced costs and improved margins.

Regarding claim 23, Rhoads discloses watermark embedded and reader comprising the step of generating the watermark includes the step of receiving and interpreting information from the watermark specification (column 36, lines 29-41).

Regarding claim 25, Rhoads discloses watermark embedded and reader comprising the step of generating the watermark includes the step of encoding the content that is to be in the watermark (column 35, lines 12-18).

Regarding claim 26, Rhoads discloses watermark embedded and reader comprising the step of generating the watermark includes the step of utilizing the specific watermarking technology to place the encoded content in a target object to be merged into the target document (column 45, lines 8-16).

Claim 27, is similarly analyzed as claim 1 above.

Regarding claim 29. the step of merging the watermark into the target document to thereby provide the marked document (column 35, lines 1-5).

Claim 30, is similarly analyzed as claim 29 above.

Regarding claim 31, Rhoads discloses watermark embedded and reader comprising the step of recovering the content information from the watermarked document (column 45, lines 51-56).

Regarding claim 32, Rhoads discloses watermark embedded and reader comprising the content information is recovered based on at least one of the watermark specification and the template specification (column 5, lines 17-24).

Claim 33, is similarly analyzed as claim 1 above.

Claim 34, is similarly analyzed as claim 2 above.

Claim 35, is similarly analyzed as claim 3 above.

Claim 36, is similarly analyzed as claim 4 above.

Claim 37, is similarly analyzed as claim 5 above.

Claim 38, is similarly analyzed as claim 6 above.

Claim 39, is similarly analyzed as claim 7 above.

Claim 40, is similarly analyzed as claim 8 above.

Claim 41, is similarly analyzed as claim 9 above.

Claim 42, is similarly analyzed as claim 10 above.

Claim 43, is similarly analyzed as claim 11 above.

Claim 44, is similarly analyzed as claim 12 above.

Claim 45, is similarly analyzed as claim 13 above.

Claim 46, is similarly analyzed as claim 14 above.

Claim 47, is similarly analyzed as claim 15 above.

Claim 48, is similarly analyzed as claim 16above.

Claim 49, is similarly analyzed as claim 17 above.

Claim 50, is similarly analyzed as claim 18 above.

Claim 51, is similarly analyzed as claim 19 above.

Claim 52, is similarly analyzed as claim 20 above.

Claim 53, is similarly analyzed as claim 21 above.

Regarding claim 54, Rhoads discloses watermark embedded and reader

comprising the watermark generation module is adapted to receive dynamic information

to be in the watermark (column 7, lines 55-61).

Regarding claim 55, Rhoads discloses watermark embedded and reader

comprising the watermark generation module includes a mark specification interpreter,

which is adapted to receive and interpret information from the watermark specification (column 7, lines 55-61 and column 36, lines 29-41).

Regarding claim 57, Rhoads discloses watermark embedded and reader comprising the watermark generation module includes a content information encoder adapted to encode the content to be in the watermark (column 16, lines 29-34).

Regarding claim 58, Rhoads discloses watermark embedded and reader comprising the watermark generation module includes a watermark technology that places the encoded content in a target object to be merged into the target document (column 7, lines 55-61).

Claim 59, is similarly analyzed as claim 27 above.

Claim 61, is similarly analyzed as claim 24 above.

Claim 62, is similarly analyzed as claim 24 above.

Regarding claim 63, Rhoads discloses watermark embedded and reader comprising a watermark recovery module for recovering the content information from the watermarked document (column 45, lines 33-41 and column 19, lines 56-67).

Claim 64, is similarly analyzed as claim 13 above.

Regarding claim 65, Rhoads discloses watermark embedded and reader comprising the steps of:

a content information means for describing application-specific content to be in watermarks (column 5, lines 17-24), the application-specific content being generated by multiple applications and including application identification that is used during watermarks recovery (column 11, lines 33-45 and column 19, lines 56-67);

a dynamic information means for specifying dynamic content that is to be determined for binding into the watermarks by the time of at least one of generating the watermarked, and creating the watermarked document (column 5, lines 17-24 and column 33, lines 9-13).

However, Rhoads is silent about the specific details regarding the step of:

a static information means for specifying static content that is already determined for binding into the watermarks.

In the same field of endeavor, however, Downs discloses electronic content delivery system comprising:

a static information means for specifying static content that is already determined for binding into the watermarks (column 14, lines 19-27).

It would have been obvious to a person of ordinary skill in the art at this time the invention was made to use static information for specifying static content that is already determined for binding into the watermarks as taught by Downs in the system of Rhoads because Downs provides Rhoads a system with the digital content providers the ability to achieve fast settlement of payment through immediate sales reporting and electronic digital reconciliation as well as gain secondary sources of revenue through redistribution, of content. The digital content providers and retailers may realize reduced costs and improved margins.

Regarding claim 66, Rhoads discloses watermark embedded and reader comprising a mark technology specification means for describing a specific

watermarking technology to be used in creating the watermarks (column 11, lines 33-38).

Claim 67, is similarly analyzed as claim 9 above.

Claim 68, is similarly analyzed as claim 10 above.

Claim 69, is similarly analyzed as claim 10 above.

Claim 70, is similarly analyzed as claim 4 above.

Claim 71, is similarly analyzed as claim 4 above.

Claim 72, is similarly analyzed as claim 12 above.

Claim 73, is similarly analyzed as claim 69 above.

Regarding claim 74, Rhoads discloses watermark embedded and reader comprising the watermark is merged into the document by at least one of manually by a user and automatically by the system (column 35, lines 20-22 and column 43, lines 21-28).

Claim 75, is similarly analyzed as claim 23 above.

Regarding claim 76, Rhoads discloses watermark embedded and reader comprising the steps of:

a content information means for generating application-specific content information to be in the watermark (column 5, lines 17-24), the application-specific content information being generated by multiple applications and including application identification that is used during watermark recovery (column 11, lines 33-45 and column 19, lines 56-67);

a watermark specification means for generating a watermark specification having

information regarding the watermark based on the content information (column 11, lines

33-38; column 44, lines 62-67 and column 45, lines 1-16);

a watermark generation means for generating the watermark in a target object

based on at least one of a watermark specification, a target object information, and

dynamic content information (column 33, lines 9-13).

However, Rhoads is silent about the specific details regarding the step of:

a template specification means for generating a template specification

having at least one merge map that describes how each watermark is to be merged into

a target document;

In the same field of endeavor, however, Downs discloses electronic content delivery

system comprising:

a template specification means for generating a template specification

having at least one merge map that describes how each watermark is to be merged into

a target document (column 29, lines 43-45; and column 41, lines 20-36);

It would have been obvious to a person of ordinary skill in the art at this time the

invention was made to use generating a template specification as taught by Downs in

the system of Rhoads because Downs provides Rhoads a system with the digital

content providers the ability to achieve fast settlement of payment through immediate

sales reporting and electronic digital reconciliation as well as gain secondary sources of

revenue through redistribution, of content. The digital content providers and retailers

may realize reduced costs and improved margins.

Regarding claim 77, Rhoads discloses watermark embedded and reader

comprising the content information also includes at least one of digital rights

information, text content information, and reference to a workflow processing application

(column 37, lines 1-8).

Claim 79, is similarly analyzed as claim 57 above.

Claim 80, is similarly analyzed as claim 75 above.

Claim 81, is similarly analyzed as claim 65 above.

Claim 82, is similarly analyzed as claim 65 above.

Claim 83, is similarly analyzed as claim 7 above.

Claim 84, is similarly analyzed as claim 67 above.

Claim 85, is similarly analyzed as claim 10 above.

Claim 86, is similarly analyzed as claim 70 above.

Claim 87, is similarly analyzed as claim 17 above.

Claim 88, is similarly analyzed as claim 17 above.

Claim 89, is similarly analyzed as claim 74 above.

Claim 90, is similarly analyzed as claim 1 above.

Claim 91, is similarly analyzed as claim 78 above.

4.   Claims 24, 28, 56 and 78 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Rhoads (6,614,914 B1) and Downs et al (6,226,618) as applied to

claims 1, 33, 65 and 76 above, and further in view of Davis et al (6,611,607).

Regarding claim 24, Rhoads and Downs are silent about the specific details

regarding the step of generating the watermark includes the step of parsing the

watermark specification to thereby obtain the information required to generate the

watermark.

In the same field of endeavor, however, Davis discloses a system for preventing piracy

of digital content comprising the step of parsing the watermark specification to thereby

obtain the information required to generate the watermark (column 12, lines 22-27).

It would have been obvious to a person of ordinary skill in the art at this time the

invention was made to use the step of parsing as taught by Davis in the system of

Rhoads because Davis provides Rhoads a system which the watermark may be used to

locate the metadata, which may be hidden for security purposes. The metadata located

from the watermark may be located on the same storage medium that includes the first

media signal.

Claims 28, 56, 60 and 78 are similarly analyzed as claim 24 above.

Other prior art Cited

5.   The prior art made of record and not relied upon is considered pertinent

to applicant's disclosure.

Charbon et al (U S 6,625,780 B1) disclose watermarking based protection of

visual component blocks.

Carr et al (U S 6,389,151 B1681) disclose printing and validation of self

validating security documents.

Stefik et al (U S 6,233,684 B1) disclose system for controlling the distribution

and use of rendered digital works through watermarking.

Rhoads (U S 6,278,781 B1) discloses wireless telephony with steganography.

Contact Information

6.   Any inquiry concerning this communication or earlier communications from the
Examiner should be directed to ABOLFAZL TABATABAI whose telephone number is
(703) 306-5917.
The Examiner can normally be reached on Monday through Friday from 9:30 a.m. to
7:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the
Examiner's supervisor, Mehta Bhavesh M, can be reached at (703) 308-5246. The fax
phone number for organization where this application or proceeding is assigned is (703)
872-9306.

Information regarding the status of an application may be obtained from the
Patent Application Information Retrieval (PAIR) system. Status information for published
applications may be obtained from either Private PAIR or Public PAIR. Status
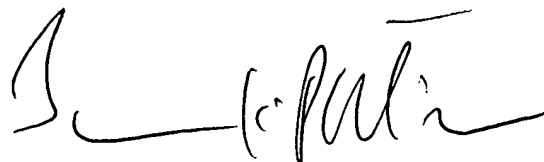information for unpublished applications is available through Private PAIR only.
For more information about the PAIR system, see http://pair-direct.uspto.gov. Should
you have questions on access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free).

Abolfazl Tabatabai

Patent Examiner

Group Art Unit 2625

March 7, 2004

Jayanti K. Patel
Primary Examiner